The genera of Mutillidae (Hymenoptera) parasitic on tsetse flies (Glossina; Diptera)*

by

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Mutilla glossinae Turner, 1915 and M. auxiliaris Turner, 1920 are transferred to Chrestomutilla gen. nov., which is defined. M. benefactrix Turner, 1916 is transferred to Smicromyrme Thomson, 1870.

The hymenopterous parasites of tsetse flies (Glossina) include three known species in the family Mutillidae (Buxton, 1955). All were originally described by Turner (1915, 1916, 1920) and all were placed in the portmanteau genus Mutilla. In view of the possible importance of these parasites as control agents of tsetse, and because of recent investigations on parasitisation of Glossina species (e.g., Heaversedge, 1968, 1969a, 1969b), the species of Mutillidae involved should be assigned to their correct genera. Two of the species are included in the new genus Chrestomutilla (described below) and the third is transferred to the genus Smicromyrme.

CHRESTOMUTILLA gen. nov.

(chrestos (Gr.), useful + mutilla)

Type-species: Mutilla glossinae Turner, 1915.

Female. Head rounded, narrower than mesosoma; mandibles simple, almost straight, with a single minute preapical tooth within; eyes oval, somewhat projecting, distinctly faceted. Mesosoma with lateral margins convex, slightly more contracted posteriorly than anteriorly; scutellar scale minute; pleura densely punctate. First metasomal tergum almost as broad as second, with distinct dorsal and anterior faces, slightly constricted apically; long lateral felt lines on second tergum; last tergum without a distinct pygidial area.

Male. Head quadrate, produced behind the eyes, slightly narrower than mesosoma; mandibles stout, unarmed externally; eyes oval, distinctly faceted, with a slight emargination within; first flagellar segment about half as long as second. Mesosoma coarsely punctate, about as broad as long; parapsidal furrows weak, incomplete anteriorly; tegulae small, evenly convex, smooth. Stigma small, dark; three submarginal cells and two recurrent veins. First metasomal segment apically about half as broad as second, with distinct dorsal and anterior faces, somewhat constricted apically; long lateral felt lines on second tergum; very short lateral felt lines on second sternum.

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This genus is closely related to Dasylabroides André, 1901. The female differs in the form of the first metasomal tergum (not as broad and without distinct dorsal and anterior faces in Dasylabroides) and the lack of a definite pygidial area (pygidium well developed and longitudinally striate in Dasylabroides). The male differs in the form of the mandibles (armed externally in Dasylabroides), the form of the first metasomal tergum (more petiolate, relatively narrower and without distinct dorsal and anterior faces in Dasylabroides) and the presence of felt lines on the second sternum (absent in Dasylabroides).

Chrestomutilla includes Mutilla glossinae Turner, 1915 and Mutilla auxiliaris Turner, 1920, both parasitic on tsetse flies. Mutilla maja Péringuey, 1898, which was included in Dasylabroides by Bischoff (1920), should also be transferred to Chrestomutilla.

Genus SMICROMYRME Thomson, 1870

Mutilla benefactrix Turner, 1916 is a member of the genus Smicromyrme Thomson, 1870, although the female differs from most species in that genus in the form of the pygidium. In most species of Smicromyrme there is a well developed pygidial plate, usually longitudinally striate and with marked lateral margins. In benefactrix the female has a very weakly margined smooth area on the last tergum. Species of Smicromyrme parasitize a wide range of hosts, including Hymenoptera, Diptera and Coleoptera (Grandi, 1961).

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